

# BEDBUGS



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# BEDBUGS

- Bedbugs are not currently associated with the transmission of human diseases
- Bedbugs are considered a nuisance pest and a pest of health significance



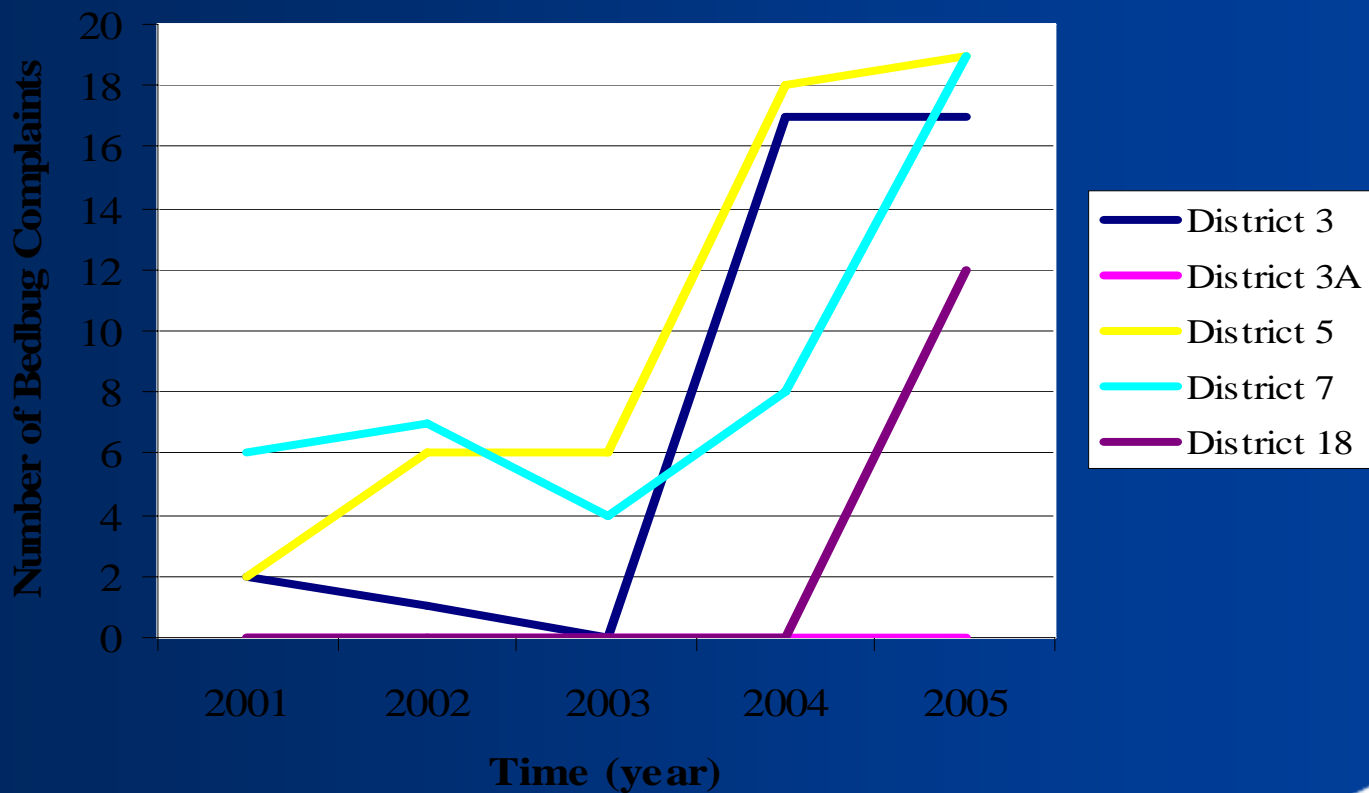
# BEDBUGS IN A TORN MATRESS



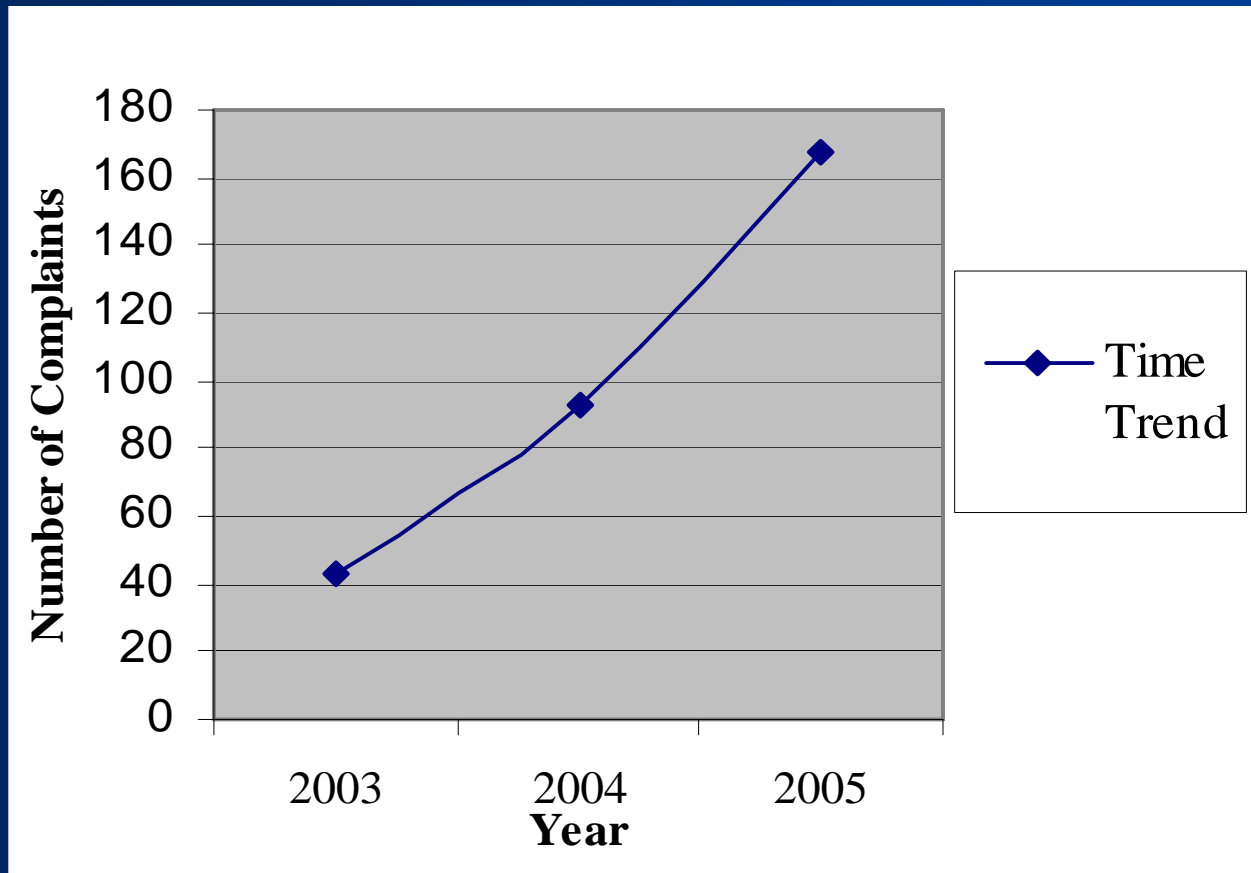
# EVIDENCE OF A BEDBUG INFESTATION



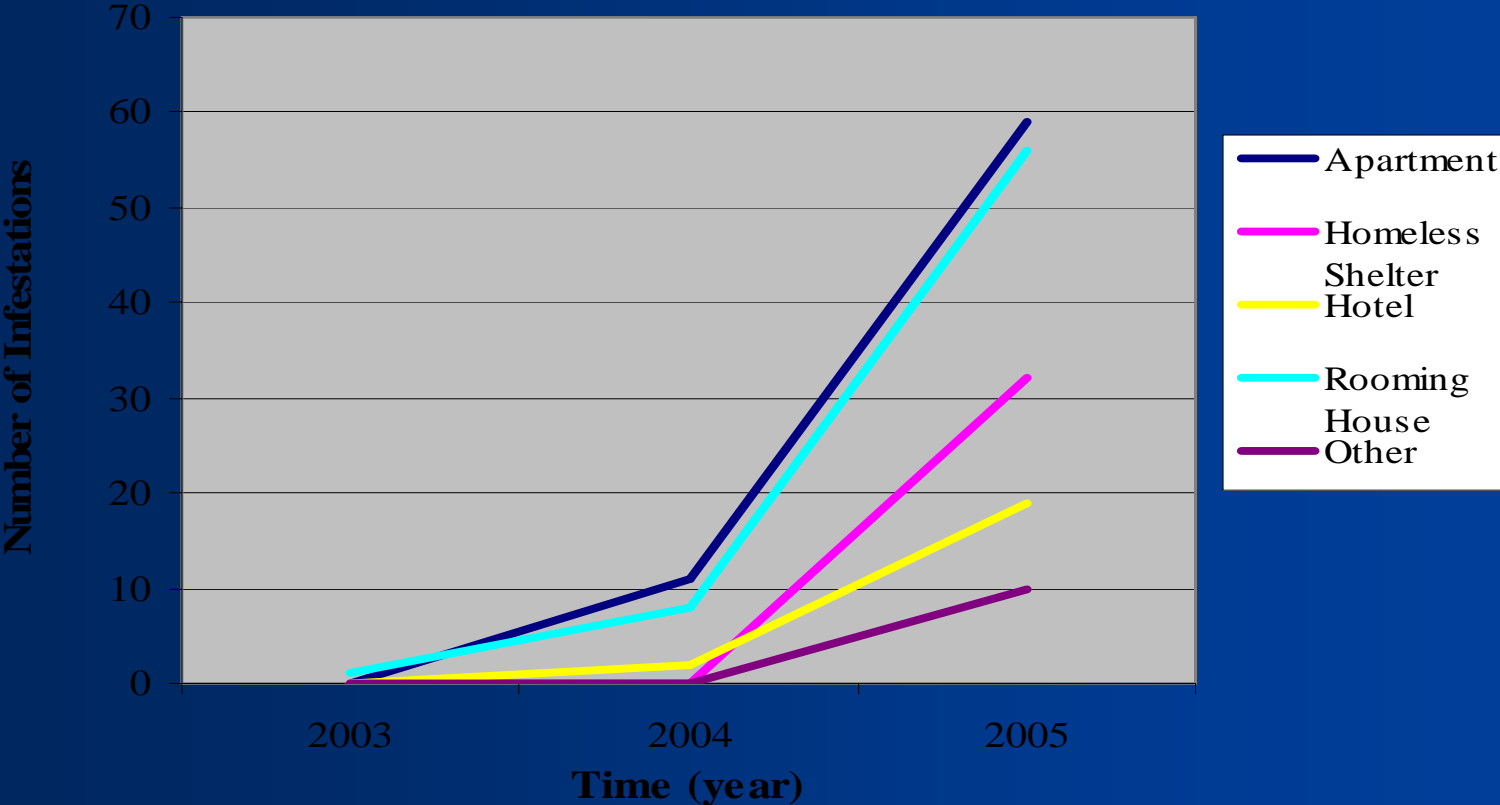
# COMPLAINT CALLS TO HEALTH UNIT DISTRICTS



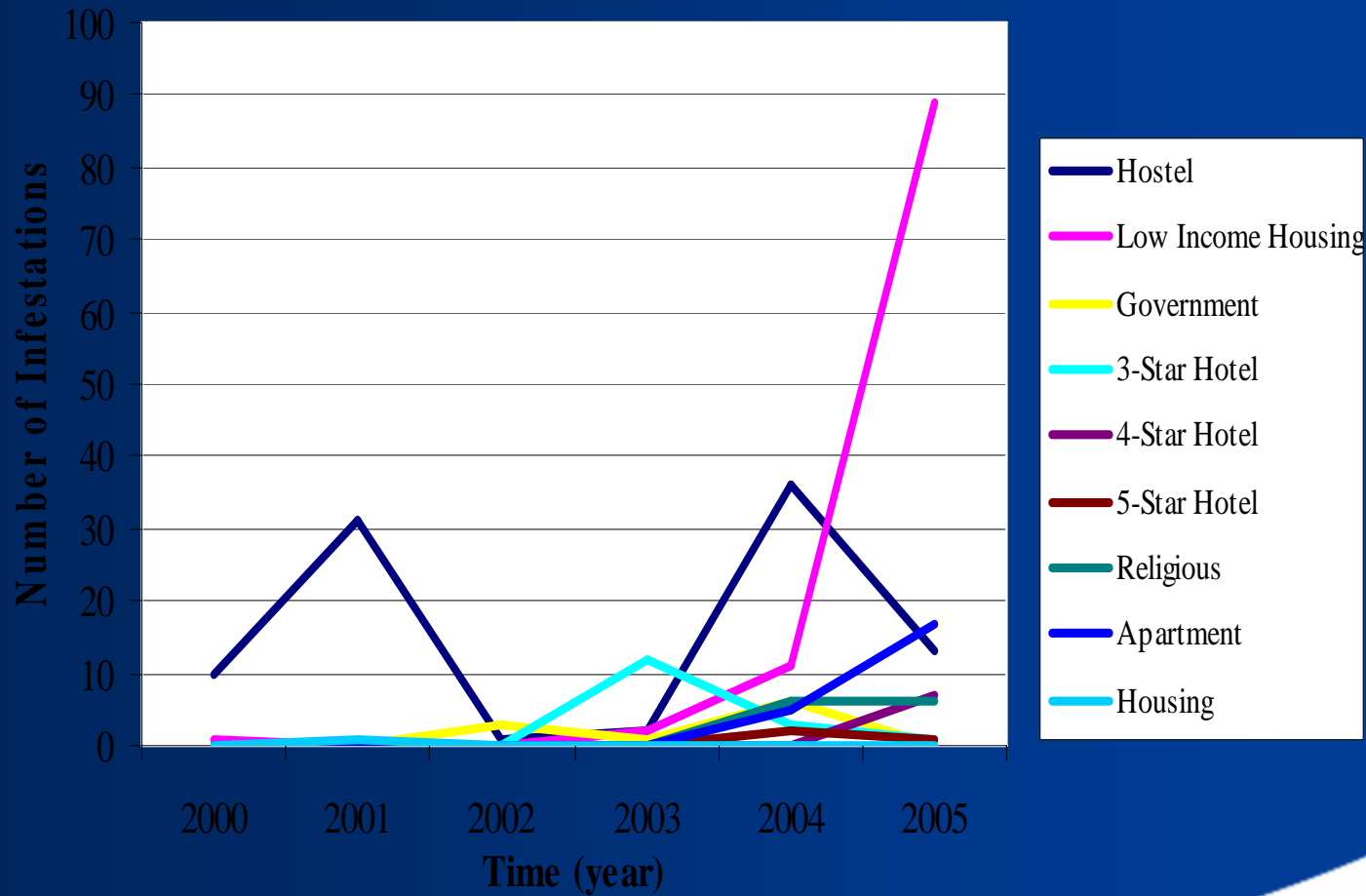
# VANCOUVER BEDBUG TIME TREND



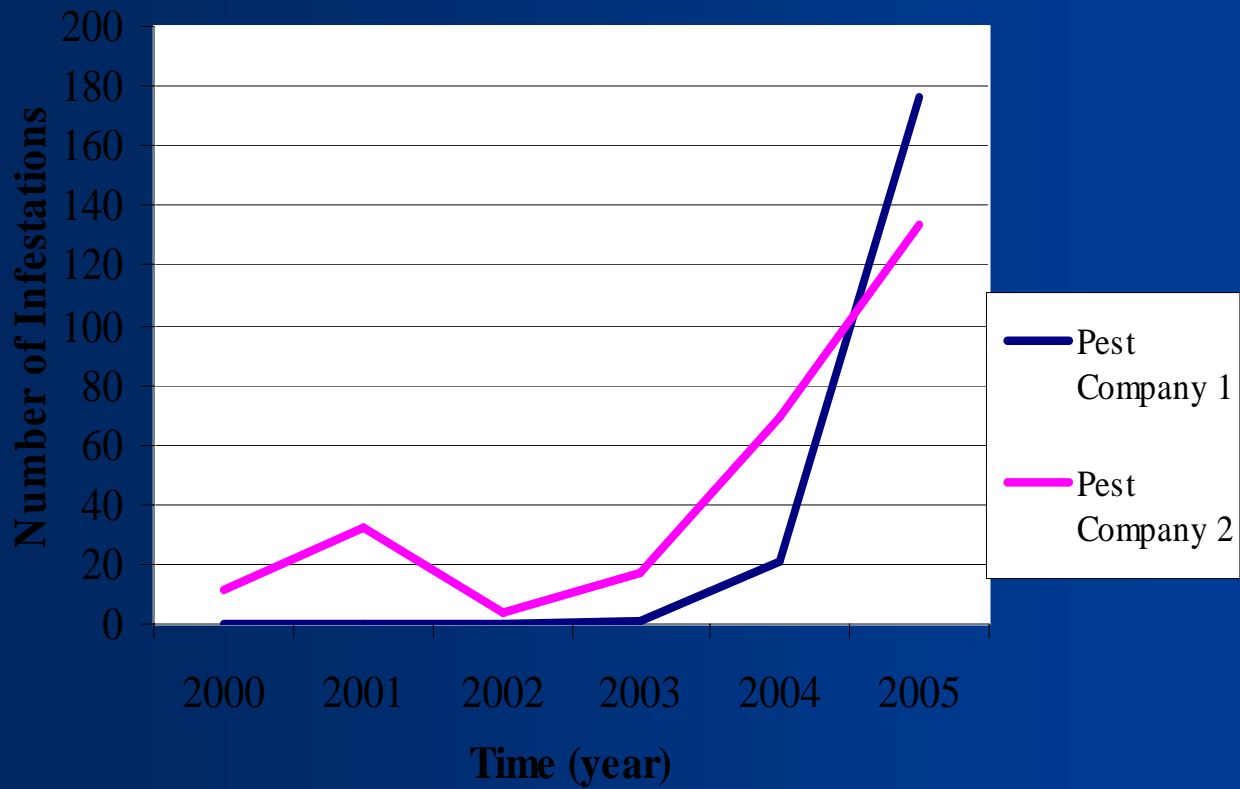
# SUMMARY OF CALLS TO PEST CONTROL COMPANY 1



# SUMMARY OF CALLS TO PEST CONTROL COMPANY 2



# COMPARISON OF CALLS BETWEEN PEST COMPANIES

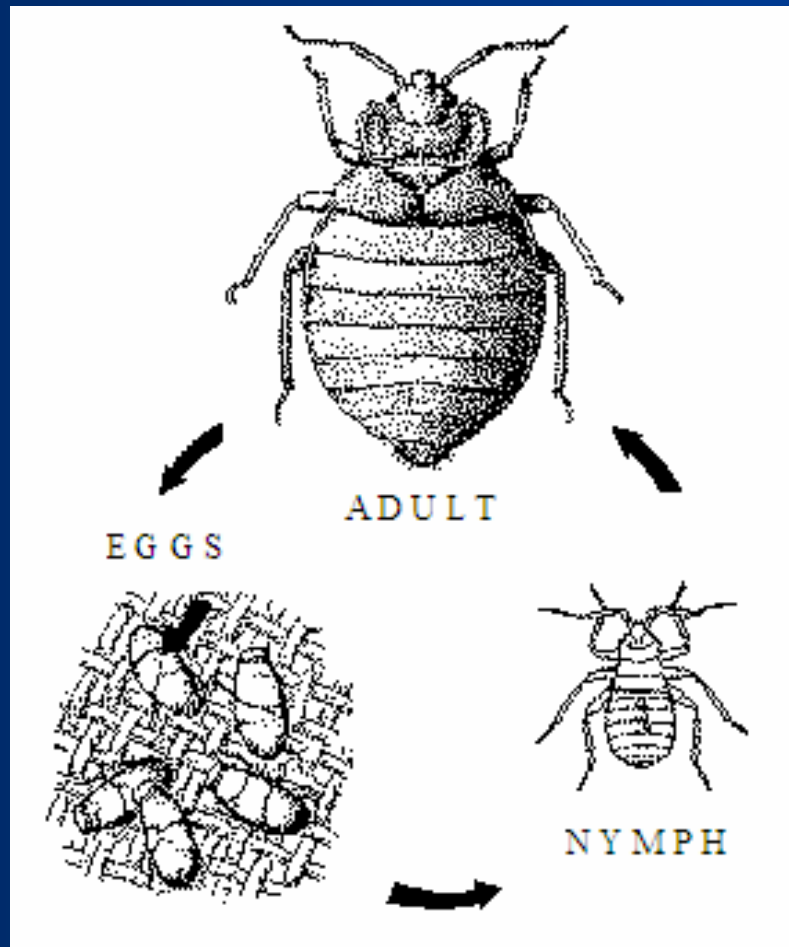


# BEDBUGS

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- Bedbugs do not fly, but crawl over floors, walls, and ceilings. They can hitch rides and move around on clothing, bedding, furniture, and luggage.
- Bedbugs usually feed at night and hide in aggregates in cracks and crevices during the day.
- Favorite places to hide include behind and under baseboards, cracks in the floor, seams in mattresses and box springs, cracks in bed frames, inside furniture and electrical boxes.

# BEDBUG LIFECYCLE



# BEDBUG

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- Bedbug eggs are usually strongly attached to rough surfaces close to their daytime hiding places.



# BEDBUGS LIFECYCLE

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- 5 instars in nymph stage
- Must have blood meal to molt from each instar
- Can survive extended periods without blood meal in between each molt
- Average life span is about 6 – 9 months
- Broadly flat and oval
- Brown turning reddish brown after feeding

# ADULT BEDBUG

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# BEDBUGS BITES

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- Bedbugs bites may occur on any exposed skin. There is a wide variability in reaction to bites and especially the bedbugs saliva. If you have been bitten-
- Wash the bite areas with soap
- Ice may help decrease swelling
- Avoid scratching
- If secondary infections occur seek medical attention

# TYPICAL APPEARANCE OF BITES

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# BEDBUG BITES

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- Bite are normally painless
- Bite location does not have any characteristic red spot
- Will often make 3 bites in a row: “breakfast, lunch, and dinner”
- Most active during the hours before dawn (eg. 2-6 am)
- Will only remain on host long enough to feed to repletion

# BEDBUGS

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- When working in a suite with bedbugs-
- Minimize the amount of personal and work related items taken in to the home (clothing, purses, bags and equipment)
- Check all clothing and equipment after leaving
- Wear light colored clothing for easy detection and avoid wearing clothing with cuffs
- If taking items in to the suite hang them up as opposed to placing them on furnishings

# BEDBUGS

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- People working in heavily infested suites have reported finding bedbugs on their clothing after leaving.
- Clothing worn while working in a bedbug infested suite should be laundered on the hot cycles
- Any clothing not laundered immediately should be stored in tightly sealed bags

# BEDBUGS

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- To reduce the risk of transporting bedbugs to your personal vehicle or home our department recommends the following-
- Wearing disposable coveralls (Tyvek suits, painter suits), gloves, and shoe covers is a good idea. Tape around gloves and pant legs.
- Remove coveralls outside of building, seal in a garbage bag and dispose (or launder Tyvek suits, painter suits).
- A vacuum may be used on legs and pants if bedbug is spotted.

# KEYS TO SUCCESS

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- Reduce any clutter
- Move the bed away from the wall
- Vacuum regularly
- Launder clothing and bedding
- Monitoring using adhesives for signs of a bedbugs is always a good idea especially if there has been a problems in the past in the unit or recently in the building
- Caulking and sealing cracks and crevices will help
- Keep in mind multiple chemical treatments will be needed for control

# CHEMICAL TREATMENT

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- Legally pest control companies must give notice prior to treatment of suites
- Bedbug activity for three weeks following treatment is normal. If problems persist another treatment may be required
- In most cases treated suites should remain empty for 4-6 hours following treatment depending on the pesticide product utilized
- Ventilate the unit upon re-entry

# CHEMICAL TREATMENTS

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- Drione - An insecticidal dust
- Dragnet 2000 (spray on crack and crevice not mattress) –
- Pro-aerosol (on mattress seams) – Ready-for-use insecticide
- Prelude (liquid) – Used for residual pest control .
- Ficam Plus /W (liquid) – Used for residual pest control.

# ACKNOWLEDGMENTS

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- ERIC SILJANDER SIMON FRASER UNIVERSITY
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- ISHER DEOL, CATH GEE, GORAV NAGI BCIT INSTITUTE OF TECHNOLOGY